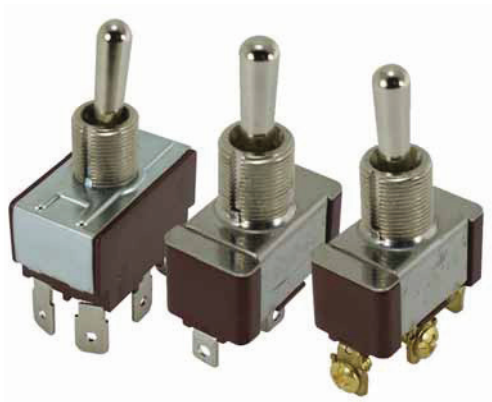


X Series Toggles



Product Description

Eaton's new, competitively priced, AC rated X Series toggles offer a standard high rating for both single- and two-pole applications. The new X Series toggle line offers a wide range of switching circuits, functions and accessories. Ratings for single- and two-pole include 20A at 125 Vac and 10A at 277 Vac to handle more severe inductive, motor and lamp loads.

In addition, X Series toggles have a high standard horsepower rating of 1-1/2 hp, 125–250 Vac for two-pole applications.

The easy-to-install toggles also have an industry-standard 0.48 in diameter mounting hole. For added convenience and delivery support, select industry-standard switch circuit part numbers are available from stock. With so many features, X Series toggles can be used in a variety of applications.

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Application Description

- Commercial and industrial equipment
- Household appliances
- Industrial machinery and automation
- Medical equipment
- Military communications and surveillance
- Rail systems
- Signaling and communications
- Test and lab equipment
- Telecommunications, cable and broadcasting

Standards and Certifications

- UL Recognized component for Canada File E2702
- RoHS Compliant ^①



Note

- ^① Visit www.eaton.com/vcbu for the most up-to-date list of verified part numbers.

Product Selection

Single-Pole ^①

Circuit with Toggle in ...

Poles and Throw	UP Position	CENTER Position	DOWN Position ^②	Terminal Type—Catalog Number		
				0.250 in Spade	Screw	Solder Lugs
1PST	ON	NONE	OFF	XTD1A1A2	XTD1A2A2	XTD1A3A2
1PST	ON ^③	NONE	OFF	XTD1F1A2	XTD1F2A2	XTD1F3A2
1PDT	ON	OFF	ON	XTD2B1A	XTD2B2A	XTD2B3A
1PDT	ON	NONE	ON	XTD2C1A	XTD2C2A	XTD2C3A
1PDT	ON	NONE	ON ^③	XTD2D1A	XTD2D2A	XTD2D3A
1PDT	ON ^③	OFF	ON ^③	XTD2E1A	XTD2E2A	XTD2E3A
1PDT	ON	OFF	ON ^③	XTD2G1A	XTD2G2A	XTD2G3A

Two-Pole ^④

Circuit with Toggle in ...

Poles and Throw	UP Position	CENTER Position	DOWN Position ^②	Terminal Type—Catalog Number		
				0.250 in Spade	Screw	Solder Lugs
2PST	ON	NONE	OFF	XTD3A1A2	XTD3A2A2	XTD3A3A2
2PST	ON ^③	NONE	OFF	XTD3F1A2	XTD3F2A2	XTD3F3A2
2PDT	ON	OFF	ON	XTD4B1A	XTD4B2A	XTD4B3A
2PDT	ON	NONE	ON	XTD4C1A	XTD4C2A	XTD4C3A
2PDT	ON	NONE	ON ^③	XTD4D1A	XTD4D2A	XTD4D3A
2PDT	ON ^③	OFF	ON ^③	XTD4E1A	XTD4E2A	XTD4E3A
2PDT	ON	OFF	ON ^③	XTD4G1A	XTD4G2A	XTD4G3A

Notes

^① Ratings: 20A at 125 Vac, 10A at 277 Vac, 3/4 hp, 125–250 Vac; recommended up to 15A at 28 Vdc.^② Keyway position.^③ Indicates momentary position.^④ Ratings: 20A at 125 Vac, 10A at 277 Vac, 1-1/2 hp, 125–250 Vac; recommended up to 15A at 28 Vdc.

Accessories

See Accessories on **Page V11-T4-31**.

Technical Data and Specifications

X Series Toggles

Description	Specification
Single-pole rating	20A, 125 Vac; 10A, 277 Vac; 3/4 hp 125–250 Vac; Recommended up to 15A at 28Vdc
Two-pole rating	20A, 125 Vac; 10A, 277 Vac; 1-1/2 hp 125–250 Vac; Recommended up to 15A at 28Vdc
Available circuits	1PST, 1PDT, 2PST, 2PDT
Terminal types	Brass screw, brass solder lugs, brass nickel-plated 0.250 in spade
Hardware included	Zinc nickel-plated knurl nut, zinc nickel-plated hex nut
Mounting means	Threaded bushing 12.0 +0.1, –0 mm; 16.5 +1, –1 mm
Keyway	1.8 mm located in DOWN position
Base material	Thermoset molding material
Finish	Bright nickel-plated toggle lever and bushing
Contact mechanism	Slow-make/slow-break butt contact
Contact resistance	50 ohm maximum
Dielectric strength	AC 1500V, 1 minute
Operating temperature	32° to 149°F (0° to 65°C)
Insulation resistance	DC 500V 100M ohm minute
Seal level rating	IP40
Packaging	Sealed in polybag labeled with part number

4.6

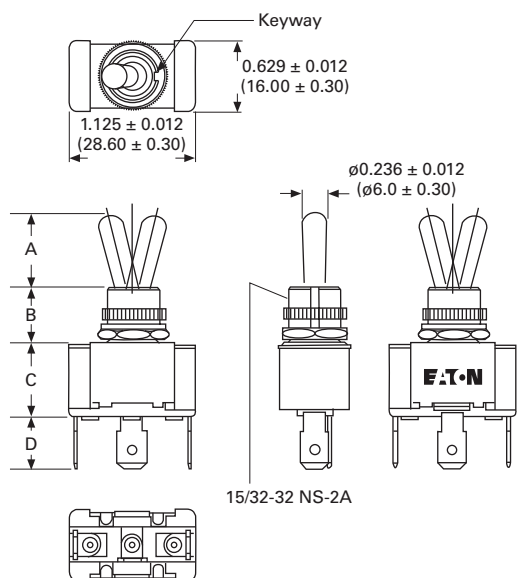
Toggle Switches

X Series Toggles

Dimensions

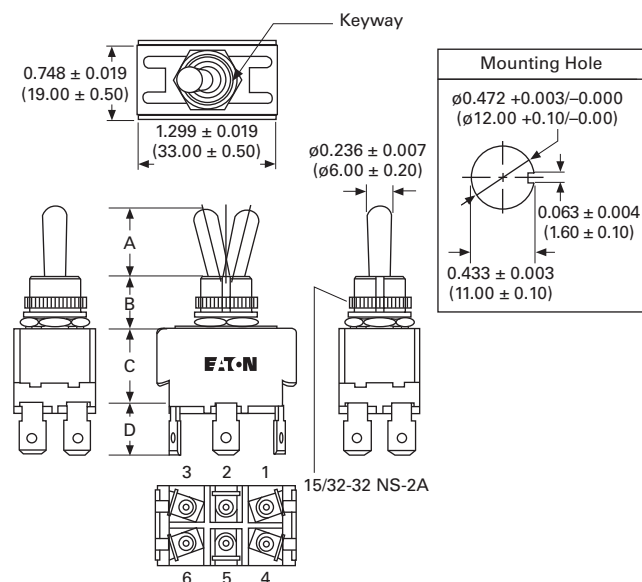
Approximate Dimensions in Inches (mm)

Single-Pole



- A** 0.649 ± 0.039
(16.50 ± 1.00)
- B** 0.468 ± 0.012
(11.90 ± 0.30)
- C** 0.677 ± 0.019
(17.20 ± 0.50)
- D** 0.452 ± 0.019
(11.50 ± 0.50)

Two-Pole



- A** 0.649 ± 0.039
(16.50 ± 1.00)
- B** 0.468 ± 0.012
(11.90 ± 0.30)
- C** 0.740 ± 0.019
(18.80 ± 0.50)
- D** 0.452 ± 0.019
(11.50 ± 0.50)

Mounting Hardware

Product Description

One-Hole Mounting Switches

All bushing mounted switches are furnished with two mounting nuts. One nut is mounted behind the panel to prevent the bushing sleeve from being distorted if the front panel is overtightened

Eaton accepts no responsibility for damage to switches mounted without the backup nuts.

Product Selection

Mounting Hardware for One-Hole Mounting Switches—Mounting Nuts ^①

Size	Description	Material	Thickness Dim. "A" in Inches (mm)	Inside Diameter Dim "B" in Inches (mm)	OD or Dimension Across Flats Dim. "C" in Inches (mm)	Dimension Across Corners Dim. "D" in Inches (mm)	Catalog Number
3/8-27	Hexagon locknut	Nickel-plated brass	0.125 (3.18)	—	0.562 (14.27)	0.625 (15.88)	15-2526-2
3/8-24		Bright nickel-plated brass	—	—	—	—	15-1525-6
11/32-32		Nickel-plated brass	0.063 (1.60)	—	0.473 (12.01)	0.531 (13.49)	15-1525-2
15/32-32	Hexagon locknut	Zinc-chromate treated	0.075 (1.91)	—	0.625 (15.88)	—	15-192
		Bright nickel-plated brass	0.078 (1.98)	—	0.546 (13.87)	0.625 (15.88)	15-2525-58
		Zinc-chromate treated	0.188 (4.76)	0.783 (19.89)	1.125 (25.80)	—	15-2528-2
	Hexagon facenut	Nickel-plated brass	0.078 (1.98)	—	0.562 (14.27)	0.656 (16.66)	15-966-2
		Semi-lustre nickel-plated brass	—	—	—	—	19-966-6
	Knurled facenut	Bright nickel-plated brass	0.066 (1.68)	—	0.562 (14.27)	—	15-124F1
		Black cupric oxide-plated brass	—	—	—	—	15-124F5
		Brass nickel-plated brass	0.109 (2.77)	—	0.625 (15.88)	—	15-90
	Chamfered dress nut	Bright nickel-plated brass	0.151 (3.84)	0.312 (7.92)	0.687 (17.45)	—	15-994-2
	Standard knurl nut with shoulder	Nickel-plated brass	0.109 (2.77)	—	0.593 (15.06)	—	15-2534-14
	Dress nut	Satin chrome-plated brass	0.125 (3.18)	—	0.562 (14.27)	—	15-2523-4
		Black nylon	0.187 (4.75)	0.390 (9.91)	0.640 (16.26)	—	15-1048-3
	Knurled dress nut	Chrome-plated brass	0.187 (4.75)	0.312 (7.92)	0.640 (16.26)	—	15-189-5
3/4-32	Hexagon facenut	Nickel-plated steel	0.093 (2.36)	—	0.937 (23.80)	1.078 (27.38)	15-1043
#8-40	Hexagon locknut with facenut	Nickel-plated steel	0.060 (1.52)	—	0.245 (6.22)	0.216 (5.49)	15-1047

Note

^① Hardware items are sold for use with Eaton switches only. Minimum ordering quantity on all items is 100.